



United States  
Department of  
Agriculture

Forest  
Service

Southwestern Region  
Regional Office

333 Broadway SE  
Albuquerque, NM 87102  
FAX (505) 842-3800  
V/TTY (505) 842-3292

---

File Code: 3420

Date: August 25, 2008

Mr. Lawrence Morrin  
Regional Director  
Bureau of Indian Affairs  
Southwestern Regional Office  
P.O. Box 26567  
Albuquerque, NM 87125

Dear Mr. Morrin:

On August 14, Dave Conklin of our staff met with Wayne Waqui (Southwest Regional Office), and Danny Gomez and Randy Baker (Northern Pueblos Agency) to examine a proposed FY 2009 Forest Health project area on the Picuris Pueblo. Several ongoing and recently completed projects were also examined.

The proposed 24 acre project area is located north of the Booster Road (the main access through the Tribe's small commercial forest) and just south of the Carson National Forest boundary. The Booster Road area, like many other ridges along the western face of the Sangre de Cristo Mountains, has a very high incidence of ponderosa pine dwarf mistletoe. It was selectively harvested around 1980, removing most, but certainly not all, of the infected merchantable-size trees. The young understory present at that time received no thinning or mistletoe sanitation, and additional regeneration has occurred since the sale. Both tree density and mistletoe severity continued to increase, presenting some very difficult management challenges.

Since the late 1990's, much progress has been made improving forest conditions in the Booster Road area. Several projects, some of them utilizing Forest Service Forest Health suppression funding, have reduced mistletoe severity and excess stand densities. About 300 acres have been mechanically thinned, and treatment of other additional stands is in progress. Most of this work has been accomplished by Tribal members. The thinning has yielded large quantities of firewood and other small products, and a modest amount of sawtimber. Also encouraging is that fire has been re-introduced to this area: all of these recently thinned areas were prescribe-burned last fall. Fire intensity was ideal for reducing residual fuels and providing some additional mistletoe sanitation without causing excess tree mortality.

The proposed FY 2009 project area is predominantly ponderosa pine, with some scattered white fir and occasional Douglas-fir. This stand has a north-facing aspect, with relatively good site quality for this area. Excluding small openings, densities range from about 500 to over 1000 trees per acre. Dwarf mistletoe was observed nearly throughout this stand, and probably more than 80% of the pines are visibly infected.

Our recommended treatment for this area would reduce densities to between 100 and 200 trees per acre, retaining the healthiest, most vigorous trees on an irregular spacing. In marking this stand, efforts should be made to reduce mistletoe as much as possible without sacrificing the best



trees. Within dense groups of young pine (the predominant structure of this stand), lightly-infected dominant and codominant trees are often better choices for retention than intermediate or suppressed trees that appear to be mistletoe-free.

It should be noted that many trees in this stand that appear to be uninfected actually have latent infection. Latent infections (recent infections that have not yet sprouted) are very common, especially in dense stands, and may not be visible for at least 4 to 6 years after the mistletoe seeds germinate. Both latent infections and other inconspicuous infections are especially common on trees with low vigor. Therefore, both the visible mistletoe severity and overall tree quality should be used to make selections. We recommend cutting all visibly-infected trees less than 4" dbh, since most of these would become severely infected before becoming sizable trees. Lightly infected trees greater than 4" dbh should be retained where they are the best available "crop trees;" most of these should grow at a good rate for at least 15 to 20 years after treatment.

The primary objective for this stand should be to improve the growth of the best trees; eliminating the mistletoe here would be virtually impossible without complete stand replacement. Retaining all existing Douglas-firs and at least some of the better white firs will help maintain long-term stand health, since these trees are immune to pine mistletoe.

The larger diameter cut materials ("heavies") will be trucked down to the village of Picuris for utilization. Broadcast burning a year or two after thinning should provide some additional mistletoe reduction in this stand.

We commend Danny and Randy for their excellent project proposal, and the Picuris Tribe for their commitment to Forest Health. Please contact Dave at (505) 842-3288 if you have any questions about this report.

Sincerely,

*/s/ Debra Allen-Reid*

DEBRA ALLEN-REID

New Mexico Zone Leader, Forest Health

cc: Alan Quan  
Danny Gomez  
Randy Baker  
Wayne Waquiui